

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ADMINISTRATIVE CIVIL LIABILITY COMPLAINT NO. R5-2008-0620
IN THE MATTER OF
FRANK ALVIN ROGERS JR AND ROGERS TRUCKING
COLUSA COUNTY

This Complaint is issued to Frank Alvin Rogers Jr. and Rogers Trucking (hereafter Discharger) pursuant to California Water Code (CWC) section 13385, which authorizes the imposition of Administrative Civil Liability, CWC section 13323, which authorizes the Executive Officer to issue this Complaint, and CWC section 7, which authorizes the delegation of the Executive Officer's authority to a deputy, in this case the Assistant Executive Officer.

The Assistant Executive Officer of the California Regional Water Quality Control Board, Central Valley Region (Regional Water Board) finds the following:

1. The Discharger owns and operates a trucking company based in Colusa, California.
2. On 25 April 2007, Frank Rogers Trucking transported a load of aqua ammonia from the Calamco ammonia plant in Grimes to a farmer's field about one mile south of Tule Road in Colusa County. The driver unloaded 6,800 gallons of aqua ammonia into a holding tank on the edge of the field. The field is known as "Reclamation District Field No. 99BC" and the actual location of the tank was north 38 degrees 59.906' west 121 degrees 57.034'.
3. As the driver was leaving, the truck struck a two-inch valve on the holding tank, causing the tank to start spilling. Aqua ammonia flowed across the dirt and into an irrigation ditch connected to the Reclamation District 108 canal system.
4. Approximately 4,800 gallons of aqua ammonia flowed into the ditch before the holding tank's valve was replaced. Aqua ammonia is a strong base (pH of 12+) and is toxic to fish and wildlife. The Calamco Material Safety Data Sheet for aqua ammonia (Attachment A to this Complaint) contains the warning *"Toxic to fish and aquatic life. Reportable quantity for spill is 1000 lbs. Do not contaminate any body of water by direct application, cleaning of equipment or disposal."* It is estimated that over 8,000 pounds of aqua ammonia spilled. However, neither the driver nor the Discharger contacted the State Office of Emergency Services or any other agency to report the spill.
5. Two days after the spill, the California Department of Fish and Game (CDFG) was notified that there were dead fish in the Reclamation District 108 waterways. CDFG wardens investigated the spill, and found dead fish in over 15 miles of canals downstream of the point that the aqua ammonia entered the canal system (see Attachment B to this Complaint). While the wardens observed an estimated 3,500 dead fish on the surface of the water, it is likely that far more fish and other aquatic organisms had perished and were simply beyond view or already eaten by predators.

6. The CDFG wardens collected water samples from the irrigation canal as soon as they had knowledge of the spill, which was two days after occurrence. The table below shows the concentrations of ammonia and pH at locations upstream and downstream of the spill. It is expected that concentrations were higher immediately following the spill.

| Location | Ammonia as N | Undissociated ammonia (NH ₃) | pH |
|----------------------|--------------|--|------|
| Upstream of spill | 0.205 mg/L | 0.001 mg/L | 7.0 |
| At spill | 1050.0 mg/l | 427.0 mg/L | 10.0 |
| 200 yards downstream | 0.097 mg/L | 0.0007 mg/L | 7.0 |
| 1 mile downstream | 0.879 mg/L | 0.006 mg/L | 7.0 |

7. According to an analysis of the data by a CDFG Environmental Scientist (found as Attachment C to this Complaint), the discharge was “acutely toxic to aquatic life and caused the death of the fish observed by [the warden]”. To maintain a healthy population of aquatic life, the CDFG has determined that undissociated ammonia concentrations should not exceed 0.02 mg/L. Two days after the spill, the concentration was 427 mg/L, over 21,000 times higher than the limit. In addition, the spill also caused the pH of the water to increase by 1,000 times over background. Elevated pH causes a number of adverse effects to aquatic life, including respiratory dysfunction, chemical burns, loss of equilibrium, and untimely death. To protect aquatic life, the Central Valley Water Board’s Basin Plan states that the pH of surface waters shall be maintained between 6.5 and 8.5 pH units
8. Two days after the spill, Reclamation District 108 employees noticed dead fish and turned off the pumps at the District’s Rough and Ready pumping plant. This structure pumps water from the canal system into the Sacramento River. To prevent flooding in the low-lying lands, the District began recycling drainage water into the irrigation delivery canals “through all means possible.” District staff collected water samples on 28 April 2007, and after approval, began slowly pumping water into the Sacramento River.
9. A proper response for this spill would have included removing contaminated soil and appropriately disposing of it, to ensure that no residual ammonia entered the waterway at a later time. On 30 April 2007, the CDFG wardens visited the spill location and noted that “it appeared as though someone had soaked the spill area with water in order to flush any residual product from the area.” This is not an appropriate remedial measure, and may have caused additional ammonia to enter the irrigation canal, adversely affecting aquatic life.

Regulatory Considerations

10. As described above, the Discharger discharged aqua ammonia to irrigation canals tributary to the Sacramento River, which is a water of the United States.

11. The *Water Quality Control Plan Central Valley Region—Sacramento River and San Joaquin River Basins, Fourth Edition* (hereafter Basin Plan), designates beneficial uses, establishes water quality objectives, and contains implementation plans and policies for all waters of the Basin.
12. The designated beneficial uses of the Sacramento River, as specified in the Basin Plan, are municipal and domestic supply; agricultural supply; water contact recreation; non-contact water recreation; warm and cold freshwater habitat; migration of aquatic organisms; spawning reproduction and/or early development; wildlife habitat, and navigation.
13. Section 301 of the Clean Water Act (33 U.S.C. § 1311) and CWC section 13376 prohibits discharge of pollutants to surface waters except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit.
14. CWC section 13376 states, in part: *“Any person discharging pollutants or proposing to discharge pollutants to the navigable waters of the United States ... shall file a report of the discharge in compliance with the procedures set forth in Section 13260...”* and *“The discharge of pollutants...except as authorized by waste discharge requirements [NPDES permit]...is prohibited.”*
15. By failing to file a report of waste discharge as set forth in CWC section 13260 and failing to obtain an NPDES permit prior to the discharges described in the above Findings, the Discharger violated CWC section 13376 and Section 301 of the Clean Water Act.
16. CWC section 13385(a) states, in part:
“(a) Any person who violates any of the following shall be liable civilly in accordance with subdivisions (b), (c), (d), (e), and (f):
(1) Section 13375 or 13376....
(5) Any requirements of Section 301, 302, 306, 307, 308, 318, 401, or 405 of the Clean Water Act, as amended.”
17. CWC section 13385(c) states, in part:
“(c) Civil liability may be imposed administratively by the state board or a regional board pursuant to Article 2.5 (commencing with Section 13323) of Chapter 5 in an amount not to exceed the sum of both the following:
(1) Ten thousand dollars (\$10,000) for each day in which the violation occurs.
(2) Where there is a discharge, any portion of which is not susceptible to cleanup or is not cleaned up, and the volume discharged but not cleaned up exceeds 1,000 gallons, an additional liability not to exceed ten dollars (\$10) times the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons.”
18. CWC section 13271(a) states, in part: *“... any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the state, or discharged or deposited where it is, or probably will be,*

discharged in or on any waters of the state, shall, as soon as (A) that person has knowledge of the discharge, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services..." The Discharger violated CWC 13271(a) by failing to report the spill.

19. Pursuant to CWC section 13385(c), the maximum administrative civil liability which can be imposed by the Central Valley Water Board is \$48,000. This amount was calculated as follows:
 - CWC 13385 allows a liability of \$10,000 per day of discharge. Aqua ammonia spilled into the irrigation canal for one known day, on 25 April 2007.
 - CWC 13385 allows a liability of \$10 per gallon discharged, minus the first 1,000 gallons. It is estimated that 4,800 gallons were discharged, so the maximum liability is \$10 x 3,800, equaling \$38,000.
20. CWC section 13385(e) states: *"In determining the amount of any liability imposed under this section, the regional board, the state board, or the superior court, as the case may be, shall take into account the nature, circumstances, extent, and gravity of the violation or violations, whether the discharge is susceptible to cleanup or abatement, the degree of toxicity of the discharge, and, with respect to the violator, the ability to pay, the effect on its ability to continue its business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting from the violation, and other matters that justice may require. At a minimum, liability shall be assessed at a level that recovers the economic benefits, if any, derived from the acts that constitute the violation."*
21. Pursuant to CWC section 13385(e), administrative civil liability at minimum must be equivalent to the economic benefit accrued by the Discharger for its actions resulting in this spill and fish kill. The Discharger received an economic benefit by not training its truck drivers about the steps to take in the event of a spill, and by not furnishing its trucks with spill containment kits (shovel, absorbent material, etc.). The Discharger also received an economic benefit by not appropriately removing the contaminated soil or taking actions to prevent the spread of the ammonia once it entered the irrigation canal. Central Valley Water Board staff is unable to precisely calculate the economic benefit, but it is estimated to be below the assessed penalty.
22. Issuance of this Complaint is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code section 21000 et seq.), in accordance with California Code of Regulations, title 14, section 15321(a)(2).

FRANK ALVIN ROGERS JR. AND ROGERS TRUCKING IS HEREBY GIVEN NOTICE THAT:

1. The Assistant Executive Officer of the Regional Water Board charges the Discharger with an administrative civil liability in the amount of **forty eight thousand dollars**

(\$48,000). The amount of the proposed liability is based upon a review of the factors cited in California Water Code section 13385 and the State Water Resources Control Board's Water Quality Enforcement Policy, and includes consideration of the economic benefit or savings resulting from the violations.

2. A hearing on this matter will be held at the Central Valley Water Board meeting scheduled on **5/6 February 2009**, unless the Discharger does either of the following by **17 December 2008**:
 - a) Waives the hearing by completing the attached form (checking off the box next to item #4) and returning it to the Central Valley Water Board, along with payment for the proposed civil liability of **forty eight thousand dollars (\$48,000)**; or
 - b) Agrees to enter into settlement discussions with the Central Valley Water Board and requests that any hearing on the matter be delayed by signing the enclosed waiver (checking off the box next to item #5) and returning it to the Central Valley Water Board along with a letter describing the issues to be discussed.
3. If a hearing is held, the Central Valley Water Board will consider whether to affirm, reject, or modify the proposed Administrative Civil Liability, or whether to refer the matter to the Attorney General for recovery of judicial civil liability.

JACK E. DEL CONTE, Assistant Executive Officer

17 November 2008

Attachments:

A: Calamco MSDS for Ammonium Hydroxide (aqua ammonia)

B: Department of Fish and Game Arrest/Investigation Report

C: Department of Fish and Game Memorandum: Supplemental Report for the Tule Road Fish Kill, Colusa County, CA

WSW: 14Nov08

**WAIVER OF 90-DAY HEARING REQUIREMENT FOR
ADMINISTRATIVE CIVIL LIABILITY COMPLAINT**

By signing this waiver, I affirm and acknowledge the following:

1. I am duly authorized to represent Frank Alvin Rogers Jr and Frank Rogers Trucking (hereinafter "Discharger") in connection with Administrative Civil Liability Complaint R5-2008-0620 (hereinafter the "Complaint");
 2. I am informed that California Water Code section 13323, subdivision (b), states that, "a hearing before the regional board shall be conducted within 90 days after the party has been served" with the Complaint;
 3. I hereby waive any right the Discharger may have to a hearing before the Central Valley Regional Water Quality Control Board (Central Valley Water Board) within ninety (90) days of service of the Complaint; and
 4. ☐ **(Check here if the Discharger will waive the hearing requirement and will pay the fine)**
 - a. I certify that the Discharger will remit payment for the proposed civil liability in the amount of **forty eight thousand dollars (\$48,000)** by check, which will contain a reference to "ACL Complaint R5 2008-0620" and will be made payable to the "State Water Pollution Cleanup and Abatement Account." Payment must be received by the Central Valley Water Board by **17 December 2008** or this matter will be placed on the Central Valley Water Board's agenda for adoption at the **5/6 February 2009** Central Valley Water Board meeting.
 - b. I understand the payment of the above amount constitutes a settlement of the Complaint, and that any settlement will not become final until after the 30-day public notice and comment period mandated by Federal regulations (40 CFR 123.27) expires. Should the Central Valley Water Board receive new information or comments during this comment period, the Central Valley Water Board's Assistant Executive Officer may withdraw the complaint, return payment, and issue a new complaint. New information or comments include those submitted by personnel of the Central Valley Water Board who are not associated with the enforcement team's issuance of the Complaint.
 - c. I understand that payment of the above amount is not a substitute for compliance with applicable laws and that continuing violations of the type alleged in the Complaint may subject the Discharger to further enforcement, including additional civil liability.
- or-
5. ☐ **(Check here if the Discharger will waive the 90-day hearing requirement, but will not pay at the current time. The Central Valley Water Board must receive information from the Discharger indicating a controversy regarding the assessed penalty at the time this waiver is submitted, or the waiver may not be accepted.)** I certify that the Discharger will promptly engage the Central Valley Water Board staff in discussions to resolve the outstanding violation(s). By checking this box, the Discharger is *not* waiving its right to a hearing on this matter. By checking this box, the Discharger requests that the Central Valley Water Board delay the hearing so that the Discharger and Central Valley Water Board staff can discuss settlement. It remains within the discretion of the Central Valley Water Board to agree to delay the hearing. A hearing on the matter may be held before the Central Valley Water Board if these discussions do not resolve the liability proposed in the Complaint. The Discharger agrees that this hearing may be held after the 90-day period referenced in California Water Code section 13323 has elapsed.
 6. If a hearing on this matter is held, the Central Valley Water Board will consider whether to issue, reject, or modify the proposed Administrative Civil Liability Order, or whether to refer the matter to the Attorney General for recovery of judicial civil liability. Modification of the proposed Administrative Civil Liability Order may include increasing the dollar amount of the assessed civil liability.

(Print Name and Title)

(Signature)

(Date)

Material Safety Data Sheet

California Ammonia Company

Review Date: Jan 1, 2006

Attachment A
ACLC R5-2008-0620Trade Name: Ammonium Hydroxide Solution 24.9%
Registration No: None**SECTION 1****CHEMICAL PRODUCT & COMPANY INFORMATION**

| | | | |
|-----------------------------|---|----------------|---------------------------------------|
| Manufacturer or Formulator: | California Ammonia Co. P.O. Box 280 French Camp, CA 95206 | Product Name: | Ammonium Hydroxide Solution 24.9% |
| Emergency Phone - Chemtrec: | 1-800-424-9300 | Common Name: | Ammonium Hydroxide NH ₄ OH |
| | | Chemical Type: | Strong Base |
| | | CALAMCO | 1-209-466-9957 |

SECTION 2**COMPOSITION/INFORMATION ON INGREDIENTS**

| Chemical Name and Synonyms | C.A.S. No. | Chemical Formula | WT% | TLV | PEL |
|---|------------|--------------------|--------------------------|--|-------|
| Ammonium Hydroxide (% expressed as NH ₃) | 1336-21-6 | NH ₄ OH | 10-35% | 18 mg/M ³ 25 ppm ACHIH Ammonia Vapor: 50 ppm Cl, 25 ppm TLV, 35 ppm STEL | 25ppm |
| Water | 7732-18-5 | H ₂ O | Non-Hazardous Balance | | |

SECTION 3**HAZARDS INFORMATION**

Ingestion: Toxicity Data: see Section 11.
Inhalation: Toxicity Data: see Section 11.
Eye Contact: Irritation Data: see Section 11.
Skin Absorption: Absorption not known to occur—refer to skin contact.
Skin Contact: Ammonia, because of its alkalinity and water solubility, tends to break down and disrupt the outer cell layers, permitting rapid penetration. Even so, ammonia is not a systemic poison and the effects will be limited to local effects. May cause slight to severe irritation. May cause burn with prolonged contact.

Effects of Overdose: Irritation and possible burns of the skin and mucous membranes. Headache, salivation, nausea, and vomiting. Dyspnea and cough with bloody mucous discharge. Bronchitis, laryngitis, hemoptysis, and pulmonary edema or pneumonitis. Ulceration of the conjunctiva and cornea, and corneal and lenticular opacities. Damage to the eyes may be permanent.

SECTION 4**FIRST AID MEASURES**

Ingestion: Not generally possible, however, if ingestion occurs and person is conscious, give large quantities of water and, if possible, diluted vinegar, lemon juice, orange juice, or other citric juices to neutralize the ammonia.

Inhalation: REMOVE IMMEDIATELY FROM EXPOSURE AREA TO FRESH AIR. Support breathing and call a doctor.

Eyes: IMMEDIATELY FLUSH EYES with fresh flowing water for a minimum of 15 minutes. Draw back eyelids and flush thoroughly. Call and take to a doctor.

Skin: REMOVE CONTAMINATED CLOTHING AND FLUSH SKIN THOROUGHLY WITH RUNNING WATER FOR 15 MINUTES AND CALL A DOCTOR. DO NOT USE SALVES OR OINTMENT ON SKIN. Take to a doctor.

SECTION 5**FIRE FIGHTING MEASURES**

Extinguishing Media: Water spray, water fog. (Dry chemical or CO₂ in small fire only.)

Special Fire Fighting Procedures: Stop the flow of gas or liquid. Use water to keep fire exposed containers cool and to protect persons affecting the shut-off. Wear self-contained breathing apparatus and full protective clothing. Approach fire upwind and evacuate area downwind.

Unusual Fire and Explosion Hazards: The presence of oil or other combustible materials will increase the fire hazard. The explosive (flammable) range of ammonia is broadened by a mixture of oxygen replacing air, and by temperature and pressure higher than atmospheric.

SECTION 6**ACCIDENTAL RELEASE MEASURES**

Environmental Precautions: Toxic to fish and aquatic life. Reportable quantity for spill is 1000 lbs. Do not contaminate any body of water by direct application, cleaning of equipment or disposal.

Steps to be taken in case material is released or spilled: Stop the flow. Wear self-contained breathing apparatus and full protective equipment and clothing. Approach spill upwind and evacuate area downwind. Prevent runoff from entering streams or drinking water supply or sewers. Dike around spill. Dilute with water, if necessary to reduce ammonia vaporization. Can be neutralized with dilute phosphoric or sulfuric acids. Vinegar will effectively neutralize small spills of aqua ammonia.

SECTION 7**HANDLING AND STORAGE**

Precautions to be taken in handling and storing: Avoid heating containers of aqua ammonia. Avoid storing in close proximity to strong acids. Avoid contact with skin and eyes. Avoid inhalation of vapors.

Trade Name: Ammonium Hydroxide Solution 24.9%
Registration No: None

SECTION 8

EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation Protection: Local exhaust essential. Spark-proof fans desirable with mechanical ventilation. Ducts should be located at ceiling level and lead upwards to the outside. Local exhaust must be adequate to reduce NH_3 concentration below 25 ppm.

Respiratory Protection: 0-300 ppm--cartridge type with full face piece. Over 300 ppm requires SCBA.

Protective Clothing: Rubber or synthetic chemical protective suit and boots, and chemical gauntlet type gloves.

Eye Protection: Tight fitting chemical splash-proof goggles should be worn.

Other: Eyewash fountain and safety shower in area.

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|-----------------------------|---|---------------------------------|---------------|
| Boiling Point: | 80°F | Solubility in Water: | Complete |
| Density: | Sp. Gr. 0.88 - 0.90 @ 20°C | % Volatiles (by volume): | 25 - 30% |
| Flashpoint: | Not applicable | Vapor Pressure, mm Hg: | Not available |
| pH: | 11+ | Reaction with Water: | None |
| Appearance: | Colorless liquid with pungent odor. | | |
| Extinguishing Media: | Water spray, water fog. (Dry chemical or CO_2 in small fire only). | | |

SECTION 10

STABILITY AND REACTIVITY

Stability (Normal Conditions): Stable

Conditions to Avoid: Heat, open flames, and electrical equipment and fixtures which are not vapor-proof or grounded.

Incompatibility (Material to Avoid): Contact with mercury, chlorine, bromine, iodine, calcium, silver oxide, or hypochlorite can form explosive compounds.

Hazardous Decomposition Products: Ammonia is lightly reactive, easily undergoing oxidation, substitution and additional reactions. Combustion of ammonia will yield small amounts of nitrogen and water.

Hazardous Polymerization: Will not occur

SECTION 11

TOXICOLOGY INFORMATION

Ingestion: Toxicity Data: Oral human LDLo: 43 mg/kg; Oral rat LD₅₀: 350 mg/kg; Oral cat LDLo: 750 mg/kg.

Inhalation: Toxicity Data: Inhalation human LDLo: 5000 ppm; Inhalation human TCLo: 408 ppm.

Eye Contact: Irritation Data: Eye-rabbit: 750 ug SEV; 44 ug SEV.

Skin Contact: ivn--rabbit LDLo: 10 mg/kg.

SECTION 12

ECOLOGICAL INFORMATION

None listed.

SECTION 13

DISPOSAL CONSIDERATIONS

Waste Disposal Procedures: Can be used as a fertilizer material. Consult local authorities for disposal. May be diluted with large amount of water and absorbed into soil.

SECTION 14

TRANSPORT INFORMATION

| | | | |
|----------------------------------|--|-------------------------|-----------|
| Shipping name: | RQ Ammonium Solutions, 8, UN2672, P.G. III | Packaging Group: | III |
| Hazard Class: | 8 | C.A.S. Number: | 1336-21-6 |
| Reportable Quantity (RQ): | 1000 lbs/454 kg | D.O.T. Number: | UN2672 |
| Labels Required: | Corrosive | Haz Waste No: | D002 |
| Placard: | Corrosive | EPA Regist No: | None |

Refer to 49 CFR 172.101 Hazardous Materials Table for further provisions, packaging authorizations and quantity limitations.

SECTION 15

REGULATORY INFORMATION

Carcinogenicity: by IARC?: Yes () No (X) by NTP?: Yes () No (X)

This product contains ammonia, CAS No. 1336-21-6, which is subject to the reporting requirements of section 313 of Title III of the Superfund and Reauthorization Act of 1986 and 40 CFR Part 372.

SECTION 16

OTHER INFORMATION

| | | | | |
|-----------------------------------|---------------------------------|-------------------------|----------------|--------------|
| Flash Point (Test Method): | Non-flammable | Flammable Limits | LOWER | UPPER |
| Autoignition Temperature: | 850°C; 1560°F | (% BY VOLUME) | N/A | N/A |
| Hazard Rating (N.F.P.A.): | Health: 3 Fire: 1 Reactivity: 0 | Specific: | Not applicable | |

Vessel stowage requirements: This material may be stowed "on deck" or "under deck" on a cargo vessel and a passenger vessel, per 49 CFR 172.101. Material must be stowed "clear of living quarters" per 49 CFR 176.84, provision 40 and under deck stowage must be in a well-ventilated space, per 49 CFR 176.94, provision 85.

Disclaimer: This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE INFORMATION HEREIN PROVIDED. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.

ARREST/INVESTIGATION REPORT

WRD 6A (10-98)

Region #2

Page 1

| | | |
|--|---|---|
| DATE OF INCIDENT / OCCURRENCE 04/25/07 | TIME (2400) 1830 | CITY/COUNTY/JUDICIAL DISTRICT 1 Mile South of Tule Road/ Colusa/ 06620 |
| TYPE OF REPORT | | |
| <input type="checkbox"/> Arrest Report | <input type="checkbox"/> Self Initiated | <input type="checkbox"/> Commercial Fishing |
| <input checked="" type="checkbox"/> Formal Complaint | <input checked="" type="checkbox"/> Complaint | <input type="checkbox"/> Hunting |
| | <input type="checkbox"/> Recreational Fishing | <input checked="" type="checkbox"/> Inland Pollution |
| | <input type="checkbox"/> Trapping | <input type="checkbox"/> Marine Pollution |
| | | <input type="checkbox"/> CaTIP |
| | | <input type="checkbox"/> Other 1603 FG |

Suspect Information

| | | | |
|--|---|--------------------------------------|----------------------------------|
| Name Suspect #1 (First, Middle, Last) (S-1) Frank Alvin Rogers Jr. | Sex <input checked="" type="checkbox"/> M <input type="checkbox"/> F | Date of Birth (MM/DD/YY) 10/07/58 | Citation Number |
| Suspect Address (Street, Apt., City, State, Zip Code) 400 Roberts Road, Colusa, CA, 95932 | | | Home Phone (530) 458-5488 |
| Business Address (Street, Apt., City, State, Zip Code) 3832 Holloway Road, Colusa, CA, 95932 | | | Business Phone (530) 458-8616 |
| Identification: | | Suspect Description: | |
| Type: CDL # Number: P0724941 | Hair: Brown | Eyes: Brown | Height: 6'1" |
| | | Weight: 280 | Ethnicity: N/A |
| | | | Other: N/A |
| Vehicle Type <input type="checkbox"/> Auto <input type="checkbox"/> Vessel <input type="checkbox"/> Other | Description (Make, Model, Year, Color) | | License Plate Number /VIN |

Offenses and Charges

| | |
|---------|---|
| COUNT 1 | Fish and Game Code Section 5650 (a)(6); Pollution of State Waters- Aqua Ammonia |
| COUNT 2 | |
| COUNT 3 | |
| COUNT 4 | |
| COUNT 5 | |

Evidence Seized

| | | | | | |
|--|-------------------------------|-----------------------------------|------------------------------------|--------------------------------|---|
| Evidence Description (Amount, Type, Serial Number, Etc.) | <input type="checkbox"/> Held | <input type="checkbox"/> Returned | <input type="checkbox"/> Destroyed | <input type="checkbox"/> Other | Photographed? |
| | | | | | <input checked="" type="checkbox"/> Yes |
| | | | | | <input type="checkbox"/> No |

Case Synopsis

- A. Pollutant: Aqua Ammonia
B. Amount: Estimated 4800 gallons
C. Receiving Waters: Irrigation canal
D. Source: Polyurethane holding tank
E. Cause: Delivery Truck Operator error
F. Observed Wildlife Affected: Carp and Catfish
G. OES # 072572; N400: PCA H2295

| | | | |
|--|------|-----------------|------|
| Preparer's Name and Badge Number Byron B. Hernandez # 611 | Date | Reviewer's Name | Date |
|--|------|-----------------|------|

NARRATIVE/SUPPLEMENTAL

WPD-6a (10-98)

Region # 2

Page 2

| | | |
|---|---------------------|---|
| DATE OF INCIDENT / OCCURANCE 04/25/07 | TIME (2400) 1830 | CITY/COUNTY/JUDICIAL DISTRICT Approx. 1 Mile South of Tule Road/ Colusa/ 06620 |
| X" APPLICABLE <input checked="" type="checkbox"/> Narrative <input type="checkbox"/> Arrest Report <input type="checkbox"/> Supplemental <input checked="" type="checkbox"/> Formal Complaint | | TYPE OF REPORT ("X" APPLICABLE) <input type="checkbox"/> Commercial Fishing <input type="checkbox"/> Hunting <input checked="" type="checkbox"/> Inland Pollution <input type="checkbox"/> Incident Report <input type="checkbox"/> Recreational Fishing <input type="checkbox"/> Trapping <input type="checkbox"/> Marine Pollution <input type="checkbox"/> Other |
| Location/Subject/Incident Name Approx. 1 Mile South of Tule Road/ Rogers Trucking/ | | Arresting/Case Officer Byron B. Hernandez |
| | | Citation Number |

On Friday April 27th 2007, at approximately 1830 hours, I was on uniformed patrol in a marked Fish and Game patrol vehicle at Highway 45 in Colusa County. I heard Warden Mike Otto advise dispatch that he was with an employee of Reclamation District 108 at 5248 Highway 45. Warden Otto advised he was at this location in response to a report of several dead fish in a nearby waterway. I contacted Warden Otto by cell phone to offer assistance. Warden Otto advised approximately 4000 gallons of Aqua Ammonia had been spilled into a local irrigation canal on Wednesday April 25th. Warden Otto requested my assistance at his location. I arrived at Warden Otto's location where he was interviewing BILL MILLER, employee of Reclamation District 108. Warden Nate Stebbins also arrived on scene to provide assistance. MILLER advised that several fish had been killed as a result of an Aqua Ammonia spill that occurred at a location south of Tule Road. MILLER said the trucking company responsible for the spill is owned by FRANK ROGERS of Colusa. FRANK ROGERS failed to contact Fish and Game and or O.E.S. to report the spill of Aqua Ammonia. Fish and Game was advised of the situation on Friday April 27th at approximately 1415 hours by Reclamation District 108. I asked MILLER to show me on a map where the spill occurred. MILLER provided a detailed map of the irrigation canals in the effected area. MILLER offered to have an employee show me the spill location. I followed a Rec. Dist. 108 employee in my patrol unit to an area approximately one (1) mile south of Tule Road in Colusa County. This location is approximately fifteen (15) miles north of the southernmost concentration of dead fish.

I arrived at the spill location and was able to determine where the Aqua Ammonia initially contacted the soil due to a brown colored stain on the ground which appeared to be caused by a liquid substance. I could also see where the Aqua Ammonia flowed south on the gently sloped dirt surface and entered the irrigation canal. I exited my patrol vehicle and immediately noticed the strong smell of ammonia. I contacted Warden Stebbins and requested he meet me at my location for soil and water sampling. I then took photographs and a GPS reading at the exact location the Aqua Ammonia contacted the soil (North 38 degrees 59.906' / West 121 degrees 57.034').

Warden Stebbins arrived at my location at approximately 2100 hours. Warden Stebbins and I used a department issued water sampling kit to collect the following soil and water samples. PH sample # 1 was collected upstream from the location where the Aqua Ammonia entered the irrigation canal. PH sample # 2 was collected at the location where the Aqua Ammonia entered the irrigation canal. PH sample # 3 was collected approximately two hundred (200) yards south of the location where the Aqua Ammonia entered the irrigation canal. PH sample # 4 was collected approximately one (1) mile south of the location where the Aqua Ammonia entered the irrigation canal. PH sample # 5 is a soil sample taken from the location where the Aqua Ammonia initially spilled. All samples were stored in an ice chest to ensure the preservation of evidence.

On Saturday April 28th 2007, at approximately 1200 hours I returned to the spill location south of Tule Road. I continued south from the spill location approximately one (1) mile where I observed a large concentration of dead fish floating on the surface of the water. This concentration was located at a Reclamation District 108 pump station which was not running at the time of the spill. However, this irrigation canal is connected to the entire irrigation system through a series of siphon tubes which allow water to flow from the original spill location. I exited my patrol vehicle and took several photos of the dead fish on the surface of the water. I also collected a fish sample (Carp) and GPS coordinate at this location (North 38 degrees 59.021' / West 121 degrees 56.776'). The species of fish most prevalent on the surface of the water at this location were Carp. I also observed several dead Catfish at this location. Warden Stebbins and I estimated the total number of dead fish at this location to be approximately 1000. The fish sample (Carp) was measured, photographed, wrapped in aluminum foil, and placed in an ice chest.

| | | | |
|--|------|---|-----------------|
| Preparer's Name and Badge Number Byron B. Hernandez # 611 | Date | Reviewer's Name Lt. Kent J. Harrison # 409 | Date 8/27/07 |
|--|------|---|-----------------|

NARRATIVE/SUPPLEMENTAL

WPD 6a (10-98)

Region # 2

Page 3

| | | |
|---|---------------------|---|
| DATE OF INCIDENT / OCCURANCE 04/25/07 | TIME (2400) 1830 | CITY/COUNTY/JUDICIAL DISTRICT Approx. 1 Mile South of Tule Road/ Colusa/ 06620 |
| X* APPLICABLE <input checked="" type="checkbox"/> Narrative <input type="checkbox"/> Arrest Report <input type="checkbox"/> Supplemental <input checked="" type="checkbox"/> Formal Complaint | | TYPE OF REPORT ("X" APPLICABLE) <input type="checkbox"/> Commercial Fishing <input type="checkbox"/> Hunting <input checked="" type="checkbox"/> Inland Pollution <input type="checkbox"/> Incident Report <input type="checkbox"/> Recreational Fishing <input type="checkbox"/> Trapping <input type="checkbox"/> Marine Pollution <input type="checkbox"/> Other |
| Location/Subject/Incident Name Approx. 1 Mile South of Tule Road/ Rogers Trucking/ | | Arresting/Case Officer Byron B. Hernandez |
| | | Citation Number |

At approximately 1345 I met with Warden Stebbins at the CHP office in Williams. Warden Stebbins and I drove to the Fish and Game Water Pollution Control Laboratory at 2005 Nimbus Road in Rancho Cordova. At approximately 1600 hours we arrived at the Fish and Game water Pollution Control Laboratory where the samples were transferred to the custody of department laboratory staff. I completed the DFG Request for Analysis and Chain of Custody Record at this location.

Warden Stebbins and I arrived at the Reclamation District 108 Dorado Bend Plant at approximately 1730 hours. I was advised this was the southernmost location where dead fish were located as a result of the Aqua Ammonia spill. Warden Stebbins and I located a Reclamation District 108 pump in this area where we observed a large concentration of dead fish floating on the surface of the water. This irrigation canal is connected to the irrigation canal where the Aqua Ammonia was spilled by multiple siphon tubes which allowed ammonia to travel the entire route. Warden Stebbins and I exited my patrol vehicle and took several photographs of the dead fish on the surface of the water. This location also had a large number of Carp with a lesser amount of Catfish. Warden Stebbins and I estimated the total fish loss at this location to be approximately 1500. I also took a GPS coordinate reading at this location (North 38 degrees 50.910' / West 121 degrees 47.470'). All photographs and GPS coordinates are included in following pages of this report.

On Sunday April 29th, at approximately 1015 hours, I contacted BILL MILLER of Reclamation District 108. MILLER advised all of the dead fish had been removed from the irrigation canal and were currently located in a dump truck at the Reclamation District 108 office. At approximately 1335 I arrived at the Reclamation District 108 office where I photographed the dump truck used to store the dead fish. The fish were wrapped in a large plastic tarp on the bed of the truck. I lifted the corner of the tarp and took a photograph of the fish. This photograph does not provide for an accurate total fish loss. However, Warden Stebbins and I estimated the total fish loss including the fish at locations of heaviest concentrations and fish observed while driving the route of water flow to be approximately 3500.

On Tuesday May 1st, at approximately 1518 hours I contacted TONY RESENDEZ, plant manager of Calamco. Calamco is an Aqua Ammonia plant located at 2229 Highway 45 in Grimes, CA... I identified myself to RESENDEZ and asked if he currently had an account with FRANK ROGERS' Trucking Co... RESENDEZ said yes. I asked RESENDEZ if he could show me any documentation on purchases of Aqua Ammonia by ROGERS Trucking on the dates of April 24 and 25. RESENDEZ advised he would assist in any way possible and provided me with copies of all Bills of Lading for Aqua Ammonia purchases on April 24th and 25th. RESENDEZ also provided a copy of the Material Safety Data Sheet for Aqua Ammonia (see copies of MSDS in report).

On Friday May 4th, at approximately 1530 hours I contacted FRANK ROGERS by cell phone and asked if he would be willing to meet me for an interview. ROGERS agreed to meet me at the Colusa Fair Grounds at around 1600 hours. At approximately 1600 hours I contacted FRANK ALVIN ROGERS JR. at the Colusa Fair Grounds. I identified myself to ROGERS and asked him if he was aware of the Aqua Ammonia spill that occurred on Wednesday April 25th, involving his delivery truck. ROGERS said yes. I asked ROGERS to tell me how the spill occurred. ROGERS advised that the driver of the delivery truck had unloaded approximately 6800 gallons of Aqua Ammonia into the holding tank at the spill location. The driver of the delivery truck, later identified as SHELDON COPELAND attempted to make a U-turn in order to leave the area. While attempting the U-turn, one of the rear tires of the delivery tank struck the 2" valve on the holding tank.

| | | | |
|--|------|---|-----------------|
| Preparer's Name and Badge Number Byron B. Hernandez # 611 | Date | Reviewer's Name Lt. Kent J. Harrison # 409 | Date 8/27/07 |
|--|------|---|-----------------|

NARRATIVE/SUPPLEMENTAL

WPD 6a (10-98)

Region # 2

Page 4

| | | |
|---|---------------------|---|
| DATE OF INCIDENT / OCCURRENCE 04/25/07 | TIME (2400) 1830 | CITY/COUNTY/JUDICIAL DISTRICT Approx. 1 Mile South of Tule Road/ Colusa/ 06620 |
| X" APPLICABLE <input checked="" type="checkbox"/> Narrative <input type="checkbox"/> Arrest Report <input type="checkbox"/> Supplemental <input checked="" type="checkbox"/> Formal Complaint | | TYPE OF REPORT ("X" APPLICABLE) <input type="checkbox"/> Commercial Fishing <input type="checkbox"/> Hunting <input checked="" type="checkbox"/> Inland Pollution <input type="checkbox"/> Incident Report <input type="checkbox"/> Recreational Fishing <input type="checkbox"/> Trapping <input type="checkbox"/> Marine Pollution <input type="checkbox"/> Other |
| Location/Subject/Incident Name Approx. 1 Mile South of Tule Road/ Rogers Trucking/ | | Arresting/Case Officer Byron B. Hernandez |
| | | Citation Number |

When the tire struck the 2" valve on the holding tank it caused a leak. I asked ROGERS if he knew how much Aqua Ammonia spilled from the holding tank. ROGERS estimated approximately 3000 gallons. ROGERS advised the truck driver SHELDON COPELAND immediately contacted Agrisource to have someone replace the damaged valve. Agrisource immediately sent an employee, later identified as ALAN CABRAL to the spill location to replace the damaged 2" valve. I advised ROGERS that I took soil, and water samples from the spill location. I also advised ROGERS that Warden Stebbins and I went to the spill location on April 30th and it appeared as though someone had soaked the spill area with water in order to flush any residual product from the area.

ROGERS said his main concern was that the Aqua Ammonia went into the ditch and he didn't want the pumping plant located approximately one (1) mile south of the spill location to get activated. ROGERS said at the time of the spill there was barely any water in the ditch and the pumping plant was not turned on in order to hold the Aqua Ammonia within the one (1) mile length of ditch. ROGERS said he wanted this done because it takes four (4) hours for Aqua Ammonia to dissipate. ROGERS said he was told the water level in the ditch had rose three (3) feet as a result of the pump not running and he felt that everything was done because there was nothing dead at that time. ROGERS said he thought he did what he was supposed to by contacting Agrisource and District 108. He also said there is nothing in any of his handbooks that says he is required to call Fish and Game. ROGERS said he wasn't sure if he made a mistake by failing to notify Calamco of the spill.

ROGERS advised that two (2) days later, Reclamation District 108 jumped into their response because they had dead fish floating in the water fifteen (15) miles south of the spill location. ROGERS advised they didn't know weather the fish floated down, weather they were dead already or what the situation was. ROGERS said that he advised District 108 that he wasn't denying the fact that he had an accident and he would pay to have the water tested. He also stated he did not want any of the Aqua Ammonia to reach the Sacramento River which is less than a mile from the southernmost location of dead fish. ROGERS said the water was sampled and sent to Woodland for testing with negative results for Aqua Ammonia. ROGERS stated he couldn't believe that fish would be affected that far south of the spill location. ROGERS failed to mention the siphon tubes that connect the original canal to the whole water system. ROGERS tried to make it sound as though only a one mile length of the irrigation canal was affected by the ammonia spill when in fact the entire estimated fifteen (15) mile route was affected.

I asked ROGERS if he could show me the delivery truck that struck the valve on the storage container. ROGERS said yes and led me to the truck located at the Zumwalt warehouse in Colusa. I took photographs of the truck and trailer at this location. I advised ROGERS he should contact me when he receives the bill statements from Reclamation District 108 for the water sample testing and fish removal. ROGERS failed to contact me and provide the requested documentation.

On Thursday May 10th, at approximately 1540 hours I contacted ALAN CABRAL at Agrisource. CABRAL is the employee who responded to the spill location and replaced the damaged 2" valve. CABRAL said that there was approximately 2000 gallons of Aqua Ammonia still in the holding tank when he replaced the valve. ROGERS had previously stated that the holding tank was at full 6800 gallon capacity when the valve was struck. This means approximately 4800 gallons of Aqua Ammonia was spilled into the ditch.

| | | | |
|--|------|---|-----------------|
| Preparer's Name and Badge Number Byron B. Hernandez # 611 | Date | Reviewer's Name Lt. Kent J. Harrison # 409 | Date 8/27/07 |
|--|------|---|-----------------|

NARRATIVE/SUPPLEMENTAL

WPD 6a (10-98)

Region # 2

Page 5

| | | |
|---|---------------------|---|
| DATE OF INCIDENT / OCCURANCE 04/25/07 | TIME (2400) 1830 | CITY/COUNTY/JUDICIAL DISTRICT Approx. 1 Mile South of Tule Road/ Colusa/ 06620 |
| X* APPLICABLE <input checked="" type="checkbox"/> Narrative <input type="checkbox"/> Arrest Report <input type="checkbox"/> Supplemental <input checked="" type="checkbox"/> Formal Complaint | | TYPE OF REPORT ("X" APPLICABLE) <input type="checkbox"/> Commercial Fishing <input type="checkbox"/> Hunting <input checked="" type="checkbox"/> Inland Pollution <input type="checkbox"/> Incident Report <input type="checkbox"/> Recreational Fishing <input type="checkbox"/> Trapping <input type="checkbox"/> Marine Pollution <input type="checkbox"/> Other |
| Location/Subject/Incident Name Approx. 1 Mile South of Tule Road/ Rogers Trucking/ | | Arresting/Case Officer Byron B. Hernandez |
| | | Citation Number |

CONCLUSIONS AND RECOMMENDATIONS: On Wednesday June 6th, I received the test results from the water samples Warden Stebbins and I collected on Friday April 27th. Sample # 2 taken at the location where the Aqua Ammonia entered the irrigation canal showed an extremely high concentration of undissociated ammonia which would be acutely toxic to all aquatic organisms. Department of Fish and Game Staff Environmental Scientist JAMES M. HARRINGTON stated the following, "It is my opinion that the content of this sample should be considered deleterious to aquatic organisms living in the waters of the state." This sample is identified in provided documentation as sample # (L-224-07-2) see attached laboratory report. Therefore, it is requested that a complaint be filed against FRANK ALVIN ROGERS JR. and FRANK ROGERS TRUCKING for violating Fish and Game Code Section 5650 (a)(6) – Pollution of State Waters with a substance or material deleterious to fish, plant life, or bird life.

In addition to any fines or penalties assessed for the above violation, it is also requested that restitution be paid to the Department of Fish and Game for its investigative costs (See Attachment for Cost Recovery).

| | | | |
|--|------|---|-----------------|
| Preparer's Name and Badge Number Byron B. Hernandez # 611 | Date | Reviewer's Name Lt. Kent J. Harrison # 409 | Date 8/27/07 |
|--|------|---|-----------------|

State of California
Department of Fish and Game

Memorandum

Date: 3-10-08

To : Warden Byron Hernandez

From : Carol Oz, Staff Environmental Scientist
CA Department of Fish and Game-Region 2
1701 Nimbus Rd.
Rancho Cordova, CA 95670

Carol Oz

Subject: Supplemental Report for Tule Road Fish Kill, Colusa County, CA

On April 27, 2007 you informed me of an Aqueous Ammonia spill and fish kill in waters of the state, which you responded to in Colusa County, CA. I reviewed the information you provided to me regarding this incident including photographs of dead fish in the waterways, GPS coordinates, water quality data you collected, and the Material Safety Data Sheet (MSDS) for the Aqua Ammonia product. This report includes my review and interpretation of the documents and analytical reports related to this incident, and my conclusions regarding the deleterious impact of this spill to aquatic life.

Per Warden Hernandez, a report was received from a Colusa County District of Reclamation 108 employee that 4,800 gallons of Aqua Ammonia had been discharged into an irrigation canal on 4-25-07 and fish had been killed as a result (see Map attached). The employee said that the truck carrying the Aqua Ammonia that spilled was owned by Rogers Trucking Company. Upon arriving at the scene Warden Hernandez observed a strong ammonia odor at the location where Aqua Ammonia had been discharged from the truck and entered the waterway (GPS coordinate N38° 59.906'W 121° 57.034'). The Warden observed and marked locations of dead fish over an extent of District 108 irrigation canal system spanning approximately 15 miles downstream from the spill location to within 1 mile of the Sacramento River (GPS coordinate N 38° 50.910'W 121° 47.470'). At this location the Reclamation District had closed off the canal system to prevent potential migration of the Aqua Ammonia material into the Sacramento River. An estimated total of 3,500 dead fish, mostly carp and a lesser number of catfish, were observed by wardens along the 15 mile stretch of Reclamation District canals.

Warden Hernandez collected water samples, tested the pH of the water, collected a soil sample at the spill site, and also collected a dead carp sample. All samples were transported by the warden to the DFG Water Pollution Control Laboratory (WPCL) in Rancho Cordova, CA, where they were analyzed for ammonia, undissociated ammonia, and total dissolved solids by the WPCL. The pH testing was conducted by the warden in the field. Analytical results for the water samples are shown in Table 1 below (soil and fish samples are being held by the WPCL). A discussion of the results follows.

Table 1: Analytical Results for Water Samples Collected by the Warden on 4-27-07

| Water Sample Locations | Ammonia (as N) | Undissociated Ammonia (NH ₃) | Total Dissolved Solids | pH |
|--|----------------|--|------------------------|------|
| Upstream Control | 0.205 mg/L | 0.001 mg/L | 686 mg/L | 7.0 |
| Canal at point of Aqua Ammonia discharge to waterway | 1050 mg/L | 427 mg/L | 466 mg/L | 10.0 |
| 200 yds downstream of ammonia discharge point | 0.097 mg/L | 0.0007 mg/L | 305 mg/L | 7.0 |
| 1 mile south of discharge point | 0.897 mg/L | 0.006 mg/L | 224 mg/L | 7.0 |

(Shaded areas = toxic to aquatic life)

The water quality analytical results are consistent with toxicity to fish that would be expected from contact with the high concentration of undissociated ammonia and pH from the Aqua Ammonia discharge. To maintain healthy aquatic life in freshwater, the CDFG has determined that undissociated ammonia levels (measured as NH₃) should not exceed 0.02 mg/L un-ionized ammonia. The concentration of un-ionized ammonia in water at the discharge location 2 days after the spill was measured at 425 mg/L, *which was acutely toxic to aquatic life.*

Ammonia can occur in un-ionized (undissociated) and ionized forms. Undissociated ammonia is extremely toxic to fish and gill breathing aquatic organisms and it is not normally found in measurable quantities in water bodies that support fish and aquatic life. In this case, the normal background concentration of undissociated ammonia in the canal water was 0.001 mg/L. The concentration of ammonia is dependent upon the pH and temperature of the solution (Morgan and Turner, 1977). Un-ionized ammonia forms when the pH of a solution is elevated above pH 7.0 (Flis, 1937). In this case the normal pH in background water was 7.0; but the measured pH of 10.0 in water at the discharge location was *1,000 times higher* than the normal background reading.

The pH of the Aqua Ammonia material as reported on the MSDS is 11+. In general, fish and other gill-breathing organisms subjected to high pH suffer: 1) extreme respiratory dysfunction from either direct chemical erosion (similar to burning) of sensitive gill tissue and/or impairment of gas exchange at the gill surface; 2) irreversible chemical burns of optic and olfactory tissues; 3) loss of equilibrium due to respiratory distress and evacuation of the gas bladder, and 4) ultimately death (McKee and Wolf, 1971). The higher the pH, the more rapidly this occurs.

Water Quality Criteria, Publication 3-A of the California Water Resources Control Board discusses the extremes of pH (pg. 236) which are known to be lethal to common fish and invertebrate species (Table 1). Some fish, for example, will die at a pH of only 9.2, but even the most resistant fish species tested cannot survive for long at a pH of 10.1. To protect aquatic life, the California Regional Water Quality Control Board, Central Valley Region has stipulated in its Basin Plan (fourth edition) that the pH of area waters must be maintained between 6.5 and 8.5 at all times.

The Material Data Safety Sheet (MSDS) provided for Aqua Ammonia (also called Ammonia Hydroxide, NH_4OH) describes the material as a strong base, corrosive, with a pH of 11+, containing 10% to 35% ammonia. Section 9 of the MSDS states that Aqua Ammonia is toxic to fish and aquatic life and advises, "DO NOT CONTAMINATE ANY BODY OF WATER BY DIRECT APPLICATION, CLEANING OF EQUIPMENT, OR DISPOSAL".

CONCLUSIONS

Based on the known deleterious effects of Aqua Ammonia and its constituents, it is my opinion that discharge of 4,800 gallons of this material to State Waters was acutely toxic to aquatic life and caused the death of the fish observed by Warden Hernandez. Chronic deleterious effects to aquatic life in the canal system would also be expected from this toxic discharge. The release of this material to state waters constitutes a violation of Fish and Game Code Sections 5650(a) (4) and (6) which state, "It is unlawful to deposit in, permit to pass into, or place where it can pass into the waters of this State any of the following: (4) any factory refuse, lime, or slag, or (6) any substance or material deleterious to fish, plant life, or bird life".

It is likely that far more fish and aquatic life was killed as a result of this spill; additional dead fish and other aquatic organisms were likely located beyond view and/or had been eaten by predators. The toxicity the material to aquatic life continued for at least 2 days, based on the fact that the original discharge occurred on 4-25-07 and the analytical results of samples collected by the warden on 4-27-08 (2 days after the discharge of approximately 4,800 gallons of toxic Aqua Ammonia) continue to show alarmingly high concentrations of undissociated ammonia and pH at the spill location.

Please contact me at (916) 358-2918 if you have any questions about this report.

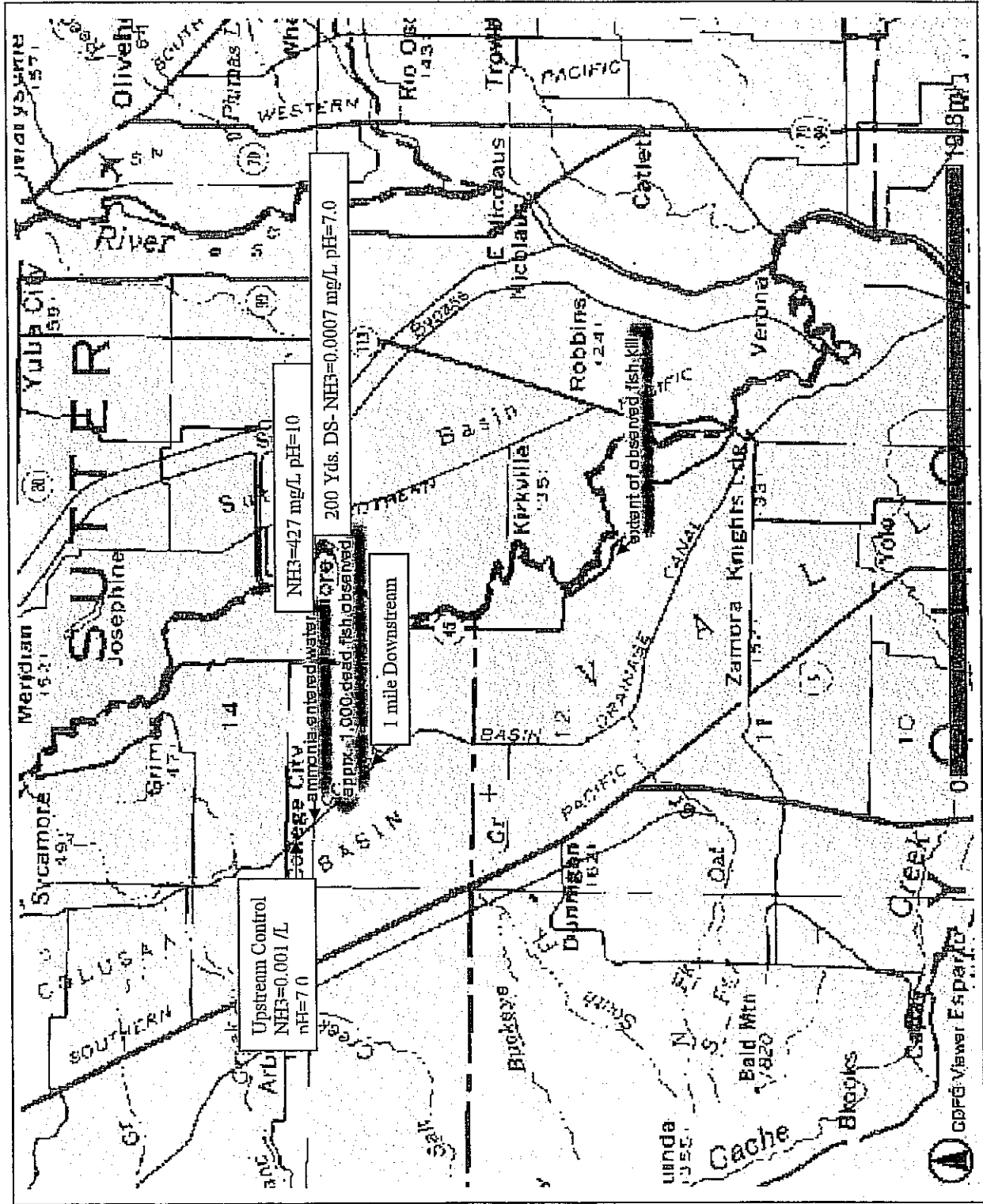
Attachment: Map

cc: Kent Harrison, DFG Lt.
Paul Hamilton, OSPR Capt.

LITERATURE CITED AND REFERENCES

- Flis, J. 1968. Anatomicohistopathological changes induced in carp (*Cyprinus carpio* L.) by ammonia water. Part II. Effects of subtoxic concentrations. *Acta Hydrobiologica* 10:225-238.
- McKee J.E. and H.W. Wolf. 1971. Water Quality Criteria. Publication 3-A. California State Water Resources Control Board. Sacramento, Ca.
- Morgan, Norman L., and J.L. Turner. 1977. Calculation of Unionized Ammonia for Fresh Water. California Department of Fish and Game Environmental Services Branch Admin. Report. No. 77-1.
- United States Environmental Protection Agency. Quality Criteria for Water 1986. U.S. Government Printing Office, Superintendent of Documents, N. Capitol and H. St. NW, Washington, D.C. 20401.

Map : Sampling Locations and Extent of Observed Fish Kill



**DRAFT PROPOSED NOTICE OF PUBLIC HEARING
TO CONSIDER ADMINISTRATIVE CIVIL LIABILITY COMPLAINT
NO. R5-2008-0620
ISSUED TO
FRANK ALVIN ROGERS JR. AND ROGERS TRUCKING
COLUSA COUNTY**

**NOTICE IS HEREBY GIVEN THAT A HEARING WILL BE HELD
BEFORE THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD,
CENTRAL VALLEY REGION (REGIONAL BOARD)
ON 5/6 FEBRUARY 2009**

Background

The Assistant Executive Officer has issued an Administrative Civil Liability (ACL) Complaint, pursuant to California Water Code (CWC) section 13385, to Frank Alvin Rogers Jr. and Rogers Trucking (Discharger) alleging that the trucking company allowed the unpermitted discharge of 4,800 gallons of aqua ammonia into a surface water near Tule Road in Colusa County. It is also alleged that the Discharger failed to notify the State Office of Emergency Services or any other regulatory agency about the spill. The Complaint proposes a civil liability in the amount of \$48,000. Unless the Discharger pays the proposed liability, a hearing will be held before the Regional Board during its meeting of 5/6 February 2009.

Purpose of Hearing

The purpose of the hearing is to receive relevant evidence and testimony regarding the proposed ACL Complaint. At the hearing, the Regional Board will consider whether to adopt the proposed assessment, modify it or reject it. If it adopts an assessment, then the Regional Board will issue an Administrative Civil Liability Order.

The public hearing on 5/6 February 2009 will commence at 8:30 a.m. or as soon thereafter as practical, or as announced in our Board meeting agenda. The meeting will be held at:

Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

An agenda for the meeting will be issued at least ten days before the meeting and will be posted on the Regional Board's web page at:

http://www.waterboards.ca.gov/centralvalley/board_info/meetings/

Hearing Procedures

A copy of the procedures governing an adjudicatory hearing before the Central Valley Water Board may be found at Title 23 of the California Code of Regulations, § 648 et seq., and is available at <http://www.swrcb.ca.gov> or upon request. Except as provided in Title 23 of the California Code of Regulations (CCR), § 648(b), Chapter 5 of the Administrative Procedures Act (commencing with § 11500 of the Government Code) does not apply to adjudicatory hearings before the Central Valley Water Board. This Notice provides additional requirements and deadlines related to the proceeding. THIS NOTICE MAY BE AMENDED BY THE ADVISORY STAFF AS NECESSARY. FAILURE TO COMPLY WITH THE DEADLINES AND REQUIREMENTS CONTAINED HEREIN MAY RESULT IN THE EXCLUSION OF DOCUMENTS AND/OR TESTIMONY.

Hearing Participation

Participants in this proceeding are designated as either “parties” or “interested persons.” Designated parties to the hearing may present evidence and cross-examine witnesses and are subject to cross-examination. Interested persons may present non-evidentiary policy statements, but may not cross-examine witnesses and are not subject to cross-examination. Both designated parties and interested persons may be asked to respond to clarifying questions from the Regional Board, staff or others, at the discretion of the Regional Board.

The following participants are hereby designated as parties in this proceeding:

- (1) Regional Board Enforcement staff
- (2) California Department of Fish and Game staff
- (3) Frank Alvin Rogers Jr. and Rogers Trucking, referred to as the Discharger

Contacts

Advisory Staff:

Lori T. Okun, Senior Staff Counsel
State Water Resources Control Board Office of Chief Counsel
1001 I Street
Sacramento, CA 95814
(916) 341-5165
fax (916) 341-5199
lokun@waterboards.ca.gov

Pamela Creedon, Executive Officer
Ken Landau, Assistant Executive Officer
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114
(916) 464-4726

fax (916) 464-4758
pcreedon@waterboards.ca.gov
klandau@waterboards.ca.gov

Enforcement Staff:

Mr. Jack DelConte, Assistant Executive Officer
Ms. Wendy Wyels, Environmental Program Manager I
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

Mayumi Okamoto, Staff Counsel
State Water Resources Control Board Office of Chief Counsel
1001 I Street
Sacramento, CA 95814
(916) 341-5674
fax (916) 341-5896
mokamoto@waterboards.ca.gov

The primary contact for the Enforcement staff is Wendy Wyels
(916) 464-4835
fax (916) 464-4681
wwyels@waterboards.ca.gov

Discharger:

Mr. Frank Alvin Rogers Jr.
Rogers Trucking
3832 Holloway Road
Colusa, CA 95932
Phone: (530) 458-8616

Separation of Functions

To help ensure the fairness and impartiality of this proceeding, the functions of those who will act in a prosecutorial role by presenting evidence for consideration by the Regional Board (Enforcement Staff) have been separated from those who will provide advice to the Regional Board (Advisory Staff). Members of the Advisory Staff are: Pamela Creedon, Executive Officer; Ken Landau Assistant Executive Officer; and Lori T. Okun, Senior Staff Counsel. Members of the Enforcement Staff are: Jack DelConte, Assistant Executive Officer; Wendy Wyels, Environmental Program Manager I, and Mayumi Okamoto, Staff Counsel.

This Notice has been issued by the Advisory Staff based on a draft proposed by the Enforcement Staff.

Mayumi Okamoto is a staff counsel assigned to the State Water Resources Control Board's Office of Enforcement. Ms. Okamoto does not advise the Central Valley Water Board on any issues, and has had no communications with the Board members regarding this case. Objections to her participation must be submitted to Lori Okun in writing or by email, by **noon on 5 January 2009**, or they will be waived.

Ex Parte Communications

The designated parties and interested persons are prohibited from engaging in *ex parte* communications regarding this matter with members of the Advisory Staff or members of the Regional Board. An *ex parte* contact is any written or verbal communication pertaining to the investigation, preparation or prosecution of the ACL Complaint/Order between a member of a designated party or interested party on the one hand, and a Regional Board member or an Advisory Staff member on the other hand, unless the communication is copied to all other designated and interested parties or made at a proceeding open to all other parties and interested persons (if verbal). Communications regarding non-controversial procedural matters are not *ex parte* contacts and are not restricted. Communications among the designated and interested parties themselves are not *ex parte* contacts.

Requesting Designated Party Status

Persons other than the Discharger or the Enforcement Staff who wish to participate in the hearing as a designated party may request party status by submitting a request in writing (with copies to the designated parties) to Lori Okun. The request must be received no later than **noon on 5 January 2009**. The request shall include an explanation of the basis for status as a designated party (e.g., how the issues to be addressed in the hearing and the potential actions by the Regional Water Board affect the person), the information required of designated parties as provided below, and a statement explaining why the party or parties designated above do not adequately represent the person's interest. The parties will be notified in writing prior to the hearing whether the request has been granted or denied.

Hearing Procedures

To ensure that all participants have an opportunity to participate in the hearing, the time limits delineated in the attached hearing procedures shall apply. Each interested person shall have up to three minutes to present a non-evidentiary policy statement. Participants with similar interests or comments are requested to make joint presentations, and participants are requested to avoid redundant comments. Additional time may be approved at the discretion of the hearing officer upon a showing that additional time is necessary. Parties should submit any requests for additional time to Lori Okun before the hearing. Additional information regarding the order of presentation is included in the attached Hearing Procedure.

Written Evidence, Testimony, Exhibits and Policy Statements

The period for submitting written comments to the Regional Water Board, as announced in the 17 November 2008 cover letter that accompanied the Administrative Civil Liability Complaint, closes on **17 December 2008**. The prosecution team will submit a Staff Report, proposed Order and draft Buff Sheet for the 5/6 February 2009 meeting. No further written comments or evidence will be accepted unless a party demonstrates good cause for the late submission and that no person, including the Regional Water Board, will be prejudiced by the late submission. A demonstration of good cause shall include the reasons the materials could not have been submitted earlier. Requests for late submissions will be decided by the Chair.

In accordance with Title 23, CCR, Section 684.4, the Regional Water Board endeavors to avoid surprise testimony or evidence. Power Point and other computer assisted visual presentations may be, but are not required to be, submitted prior to the hearing. Instructions for submittal of Power Point or other electronic materials are included in the Agenda for the 5/6 February 2009 Board meeting. Any witness providing written testimony shall appear at the hearing and affirm that the written testimony is true and correct.

Interested persons may submit one (1) copy of non-evidentiary policy statements by the close of the hearing.

Procedural Objections

Any objections to this notice or the hearing procedures must be stated at the beginning of the hearing, before staff testimony. Objections that are not made at or before that time will be waived. Parties are encouraged to submit procedural objections to Lori Okun in writing before the hearing. However, except as stated above under "Separation of Functions," parties are not required to submit objections in advance.

Evidentiary Documents and File

The Complaint, related evidentiary documents, and comments received are on file and may be inspected or copied at the Regional Board office at:

11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

Many of these documents are also posted on-line at:

http://www.waterboards.ca.gov/centralvalley/board_decisions/tentative_orders/

Although the web page is updated regularly, to assure access to the latest information, you may contact Wendy Wyels at (916) 464-4835.

Auxiliary Aids and Services

The hearing facilities will be accessible to persons with disabilities. Individuals requiring special accommodations are requested to contact Ms. Kiran Lanfranchi-Rizzardi at (916) 464-4839 at least five working days prior to the meeting. TTY users may contact the California Relay Service at 1-800-735-2929 or voice line at 1-800-735-2922.

Questions

Questions concerning this proceeding may be addressed to Lori Okun at (916) 341-5165.

Kenneth D. Landau, Assistant Executive Officer

Date

WSW: 14Nov08